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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,683	11/24/2003	Bob Streefkerk	081468-0306882	1907
909 7590 10/09/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP Eric S. Cherry - Docketing Supervisor P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER RUTLEDGE, DELLA J	
			ART UNIT 2851	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/719,683

Applicant(s)

STREEFKERK ET AL.

Examiner

D. Rutledge

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-46 and 48-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-46,48-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 20 - 23, 26, 27, 30, 34 - 37, 42 - 46, 48, 51- 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster (US Pat. No. 7,092,069) in view of Newberry et al. (US Pat. No. 4200794).

Claims 20 - 23, 26, 42 - 46, 48: Schuster has the basic immersion type lithographic exposure apparatus having an immersion lens 14. The reference does not disclose how the lens is mounted to the support, but the secondary reference (does not have a lithographic apparatus) discloses one known method of affixing a silicon lens to a glass

Art Unit: 2851

support by using a thermal direct bonding. Thus the lens used in the Schuster apparatus may have used such an affixing method.

Claims 27: the person of ordinary skill in the art would know the heating temperature to use to provide the proper bonding

Claims 26, 28, 44, 48, 49 : with heat, clean surface; using a clean surface is recognized in a bonding environment

Claims 30, 34, 35, 40, 45, 51, 52: material composition of element and support glass, fused silica, etc. are known compositions used in the art and would be among the choices selected by one skilled in the art in producing the expose apparatus

4. Claims 1 - 3, 7, 16 - 19, 38 - 41, 46, 51 - 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster (US Pat. No. 7,092,069) alone or in view of LeFlohic (US Pub. No. 2002/0186937).

Claims 1 - 3, 7, 19, 38, 46, 53: The primary reference has the basic lithographic apparatus, but does not disclose how the immersion lens 14 is mounted to the support. The secondary reference, does have a lithographic apparatus, but in paragraph 0034, discloses that a lens may be affixed to a glass support by using glue. It is already known to use a particular composition or material to affix a lens to a support, one of ordinary skill in the art would be motivated to use the known method to mount the optical elements of the Schuster et al. apparatus.

Claim 7: the joint may be made without heating

Art Unit: 2851

Claims 16 - 18, 39 - 41, 51, 52: the composition of the lens and the support may comprise the materials claimed since that are known materials in the art for use in a projection system

Claim 38: joint can be made without heating

5. Claims 6, 8 - 15, 24 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuster (US Pat. No. 7,092,069) alone or in view of LeFlohic (US Pub. No. 2002/0186937).

Claims 6, 8, 9, 12, 24, 25: direct bonding is a known method of affixing two objects; this method may be used after the initial gluing of the two objects to further secure the affixing or bonding of the objects

Claims 10, 28: using clean surfaces improves the affixing or bonding process

Claims 11, 13, 29, 31: using glass solder and heat is a known affixing and bonding process and may be used after the initial gluing of the objects to further secure the affixing process

Claims 26, 27: using heat to further improve the affixing or bonding of the two objects is an method that one of ordinary skill in the art would have used with the Schuster et al. apparatus to improve the affixing or bonding process


Response Data

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Rutledge whose telephone number is (571) 272-2127. The examiner can normally be reached on Mon - Thurs, 6:00 AM - 4:30 PM.

Art Unit: 2851

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


D. Rutledge
Primary Examiner
Art Unit 2851

dr
10/1/07